

## **SUPPLEMENTAL MATERIAL**

Supplemental Material, Table 1. OVID MEDLINE search strategy (1950-March Week 3 2009)<sup>a</sup>.

MeSH Term/Key Word	Number of Citations
1. exp Environmental Exposure/	115062
2. exp Environmental Pollutants/	137389
3. exp Pest Control/	16827
4. exp Pesticides/	100239
5. (pesticid\$ or herbicid\$ or insecticid\$ or fungicid\$).tw.	48736
6. 1 or 2 or 3 or 4 or 5	318538
7. exp Adolescent/	1276381
8. exp Child/	1268638
9. exp Infant/	778784
10. (child\$ or adolescen\$ or infant? or newborn? or youth or teenage\$).tw.	1044403
11. 7 or 8 or 9 or 10	2533340
12. exp Hematologic Neoplasms/	5919
13. exp Leukemia/	166647
14. leuk?emi\$.tw.	168588
15. 12 or 13 or 14	220691
16. 6 and 11 and 15	846

<sup>a</sup> \$ = truncation, ? = wildcard.

Supplemental Material, Table 2. Modified Downs and Black (1998) checklist for the quality assessment of case-control studies<sup>a</sup>.

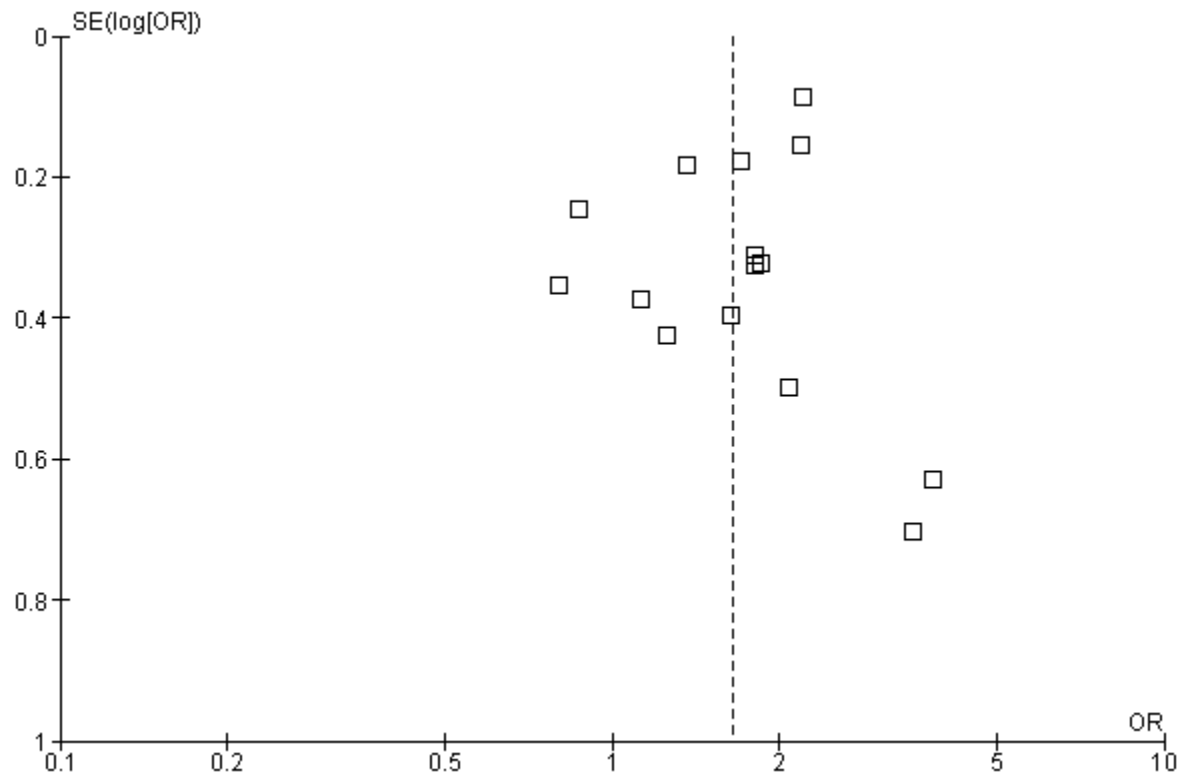
Factor	Score
<b>External Validity</b>	
1. <i>Were the subjects asked to participate in the study representative of the entire population from which they were recruited?</i> Cases and controls were representative of the source population of interest (population- or cohort-based cases and controls), the source population was identified, and subject selection described.	1
2. <i>Were those subjects who were prepared to participate representative of the entire population from which they were recruited?</i> Participation rate for cases and controls of at least 70%.	1
<b>Subtotal</b>	<b>2</b>
<b>Internal Validity – Bias</b>	
3. <i>Was an attempt made to blind those measuring the main outcomes of the intervention?</i> Exposure ascertainment was based on interviews blinded to health outcome status, mailed questionnaire, or other pre-existing or documented exposure information.	1
4. <i>If any of the results of the study were based on “data dredging”, was this made clear?</i> The study was designed to examine the reported association.	1
5. <i>In case-control studies, is the time period between the intervention and outcome the same for cases and controls?</i> Cases and controls were age matched and the exposure period examined was well-defined.	1
6. <i>Were the statistical tests used to assess the main outcomes appropriate?</i> The statistical techniques used were appropriate for the study design and sample size.	1
7. <i>Was compliance with the interventions reliable?</i> The effect of exposure misclassification was likely to bias the reported association towards the null. For example, exposure status based on pre-existing or documented information exposure information (not retrospective case interviews).	1
8. <i>Were the main outcome measures used accurate (valid and reliable)?</i> Outcome measurement was clearly described and was virtually certain (histologically confirmed cancer cases).	1
<b>Subtotal</b>	<b>6</b>
<b>Internal Validity – Exposure Measurement</b>	
9. <i>Were measures of exposure robust?</i> Exposure status was either documented or determined via biomarker (2); used small area ecological measures, job titles, or was self-reported (1); was based on large area ecological measures (0).	2
10. <i>Was there a sufficient exposure gradient?</i> The degree of variability between categories of exposure frequency, duration, or intensity was high (2), medium (1), low/unknown (0).	2
11. <i>Were measures of exposure specific?</i> Exposure measures were specific (2); based on broader, chemically-related groups (1); based on broad groupings of diverse chemical and toxicological properties (0).	2
12. <i>Were all critical exposure time windows measured and reported?</i> Exposure time windows were all (2); partially (1); or not at all defined, measured, and reported (0).	2
<b>Subtotal</b>	<b>8</b>
<b>Internal Validity – Confounding</b>	
13. <i>Were the cases and controls recruited from the same population?</i> Information on the source of study participants provided; controls representative of the study base from which cases are drawn.	1
14. <i>Were the cases and controls recruited over the same period of time?</i> The calendar period over which cases and controls were recruited was defined and similar.	1
15. <i>Was there adequate adjustment for confounding in the analyses from which the main findings were drawn?</i> The study collected data on all major (2), some (including basic demographic only) (1), or no (0) potential confounders and assessed their effect in analysis.	2
<b>Subtotal</b>	<b>4</b>
<b>Total</b>	<b>20</b>

<sup>a</sup> The Downs and Black (1998) checklist was modified by removing items that were either related only to reporting or were not applicable. We also added four new items to the checklist here that were related to exposure measurement. Items numbered 1-8 and 13-15 above are from the original Downs and Black (1998) checklist. Items 9-12 were added by us. Item 15 above was also extended to allow for a maximum of two points, instead of one, for adequate adjustment for confounding. Here studies were awarded two points for item 15 if they considered both demographic factors and ionizing radiation exposure.

Supplemental Material, Table 3. Summary of quality assessment scores.

Reference, Country	External validity	Internal validity			Total score
		Bias	Exposure measurement	Confounding	
Hospital-based case-control studies					
Schwartzbaum et al. (1991), USA	0	3	2	2	7
Fajardo-Gutierrez et al. (1993), Mexico	1	3	3	2	9
Kishi et al. (1993), Japan	0	3	3	2	8
Dell (2004), USA	1	3	6	2	12
Alderton et al. (2006), USA/Canada	1	3	4	3	11
Menegaux et al. (2006), France	1	3	3	2	9
Pombo-de-Oliveira et al. (2006), Brazil	1	4	2	2	9
Median (range)	1 (0-1)	3 (3-4)	3 (2-6)	2 (2-3)	9 (7-12)
Population-based case-control studies					
Lowengart et al. (1987), USA	1	4	2	3	10
Buckley et al. (1989), USA/Canada	2	4	4	2	12
Davis (1991), USA	2	3	4	2	11
Kishi et al. (1993), Japan	1	3	3	3	10
Steinbuch (1994), USA	2	3	3	3	11
Leiss and Savitz (1995), USA	2	3	3	2	10
Meinert et al. (1996), Germany	2	3	1	3	9
Infante-Rivard et al. (1999), Canada	2	3	5	3	13
Meinert et al. (2000), Germany	1	3	5	3	12
Ma et al. (2002), USA	1	4	6	3	14
Rudant et al. (2007), France	2	3	3	3	11
Median (range)	2 (1-2)	3 (3-4)	3 (1-6)	3 (2-3)	11 (9-14)
OVERALL MEDIAN (RANGE)	1 (0-2)	3 (3-4)	3 (1-6)	3 (2-3)	11 (7-14)

Supplemental Material, Figure 1. Inverse funnel plot of main findings from previous studies examining the relation between residential pesticide exposure and childhood leukemia<sup>a</sup>.



<sup>a</sup> Plotting the main findings from every included study except that of Schwartzbaum et al. (1991) since no data on CI's was provided. Where results were reported for more than one exposure time window, the widest exposure time window was selected here. Where results were reported for different types of pesticides, the broadest and highest pesticide exposure category was selected. Where results were presented for both indoor or outdoor pesticide exposure, the indoor value was used. Where there were results for leukemia overall as well as for specific cell types, the overall results were selected here. Where there were results reported for either owner applied or professionally applied insecticides, the owner applied value was used here. For Kishi et al. (1993) results using population-controls selected here.

## Supplemental Material, Appendix 1. Pesticide exposure indices reported in individual studies.

Lowengart et al. (1987)

- Household pesticides, garden pesticides/herbicides (pregnancy)
- Occupation in agriculture (paternal)

Buckley et al. (1989)

- Household pesticides (pregnancy, child)
- Occupational exposure to pesticides (maternal, paternal)

Davis (1991)

- Household pesticides, pesticides on nuisance pests, spray can on nuisance pests, spray liquid on nuisance pests, dust on nuisance pests, bomb for nuisance pests, no-pest-strip for nuisance pests, termite treatment, chlordane, pesticides on lice, kwell, pet pesticides, rugs treated, bare floors treated, spray can on pets, spray liquid on pets, dust on pets, flea collar on pets, shampoo on pets, garden insecticides, garden herbicides, carbaryl, diazinon, spectracide, malathion, round-up, herbicides on yard, round-up on yard, kleen-up on yard, weed-b-gon on yard, grass-b-gon on yard, crab grass killer on yard, triox on yard, poison ivy/oak killer on yard, brush-b-gon on yard, spectracide on yard (pregnancy, child)

Schwartzbaum et al. (1991)

- Garden fertilizers, herbicides, and pesticides (child)

Fajardo-Gutierrez et al. (1993)

- Household insecticides (child)<sup>a</sup>

Kishi et al. (1993)

- Household spray pesticides (pregnancy, child)
- Occupational exposure to pesticides (paternal)
- Occupation in agriculture (maternal, paternal)

Steinbuch (1994)

- Household pesticides (against ants/cockroaches/flying insects, moths/silverfish, spiders/mites, mice/rates/ gophers/moles, mosquitos, termites), professional pest extermination (termites, other pests), pesticides for pets (flea collar, fogger, powder, shampoo) (pregnancy through child, pregnancy, child)
- Occupational exposure to pesticides, insecticides, herbicides, fungicides, organophosphates, carbamate/dithiocarbamate, organochlorine, pyrethrin/pyrethroid, phenoxyacid/chlorophenoxyacid, carboxamide (maternal)

Leiss and Savitz (1995)

- Household extermination for insects or pests, yard treatment with insecticides or herbicides, hanging pest strips for insect control (pregnancy, child)

Meinert et al. (1996)

- Extermination of insects, garden pesticides, farm pesticides (preconception through child)
- Occupation as farmer, gardener, florist (paternal, maternal)
- Occupational exposure to insecticides, herbicides, fungicides (paternal, maternal)

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<sup>a</sup> Personal correspondence with study author (May 28, 2008).

Infante-Rivard et al. (1999)

- Household insecticides/rodenticides (against cockroaches/ants/flies/bees/wasps, moths, mites/spiders, rats/mice, insects, and termites) professional home treatment, pesticides in the garden, yard, and interior plants (herbicides, plant insecticides, products for trees, repellents and sprays for outdoor insects, products for slugs and snails), pesticides for pets (flea collar, insecticide powder, shampoo/soap against parasites) (pregnancy, child)

Meinert et al. (2000)

- Household insecticides, garden pesticides, farm pesticides (pregnancy through child)  
Occupational exposure to herbicides, insecticides, fungicides (paternal, maternal)

Ma et al. (2002)

- Household insecticides (professional pest control services, insect repellants, ant, fly, or cockroach control products, spider control products, termite control products, plant/tree insect or disease control products) herbicides (professional lawn service, weed control products), flea control products (indoor foggers for fleas, flea collars, flea soaps or shampoos, sprays, dusts, or powder for fleas), other outdoor pesticides (rat, mouse, gopher, or mole control products, slug or snail bait) (preconception, pregnancy, child)

Dell (2004)

- Household pesticides, yard/garden pesticides (preconception, pregnancy, child)
- Occupational exposure to pesticides (maternal, paternal)

Alderton et al. (2006)

- Household insecticides, moth control, rodenticides, flea or tick control, herbicides, insect repellants, professional pest exterminations (pregnancy, child)

Menegaux et al. (2006)

- Household insecticides, garden pesticides (insecticides, herbicides, fungicides) (pregnancy, child)
- Pediculosis treatment (child)
- Occupational exposure to pesticides (paternal, maternal)

Pombo-de-Oliveira et al. (2006)

- Household insecticides (pregnancy)<sup>a</sup>

Rudant et al. (2007)

- Household pesticides, insecticides (at home, on pets, on garden crops), herbicides, fungicides (pregnancy, child)
- Occupational exposure to pesticides (maternal)
- Occupation in agriculture (maternal, paternal)

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<sup>a</sup> Personal correspondence with study author (March 13, 2008) confirmed exposure was mainly to insecticides.

Supplemental Material, Appendix 2. Included studies in analysis.

Pregnancy exposure time window, unspecified residential pesticides

Unspecified pesticides, overall: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Kishi et al. 1993; Leiss and Savitz 1995; Lowengart et al. 1987; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007; Steinbuch 1994)

High total quality score: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Ma et al. 2002; Rudant et al. 2007; Steinbuch 1994)

High external validity score: (Buckley et al. 1989; Davis 1991; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Rudant et al. 2007; Steinbuch 1994)

High exposure measurement score: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Ma et al. 2002)

High confounding score: (Infante-Rivard et al. 1999; Kishi et al. 1993; Lowengart et al. 1987; Ma et al. 2002; Rudant et al. 2007; Steinbuch 1994)

Hospital-based: (Dell 2004; Kishi et al. 1993; Menegaux et al. 2006)

Population-based: (Buckley et al. 1989; Davis 1991; Infante-Rivard et al. 1999; Kishi et al. 1993; Leiss and Savitz 1995; Lowengart et al. 1987; Ma et al. 2002; Rudant et al. 2007; Steinbuch 1994)

ALL: (Davis 1991; Infante-Rivard et al. 1999; Kishi et al. 1993; Ma et al. 2002; Rudant et al. 2007)

AML: (Buckley et al. 1989; Rudant et al. 2007; Steinbuch 1994)

Indoor use: (Buckley et al. 1989; Dell 2004; Lowengart et al. 1987; Ma et al. 2002)

Outdoor use: (Dell 2004; Leiss and Savitz 1995; Lowengart et al. 1987; Ma et al. 2002; Menegaux et al. 2006)

Maternal use: (Davis 1991; Lowengart et al. 1987; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007)

Year published (2000+): (Dell 2004; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007)

Peer-reviewed publication: (Buckley et al. 1989; Infante-Rivard et al. 1999; Kishi et al. 1993; Leiss and Savitz 1995; Lowengart et al. 1987; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007)

Removing extreme OR's: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007; Steinbuch 1994)

Removing highest weight: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Lowengart et al. 1987; Ma et al. 2002; Menegaux et al. 2006; Steinbuch 1994)



Including wide/ill-defined exposure time windows: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Kishi et al. 1993; Leiss and Savitz 1995; Lowengart et al. 1987; Ma et al. 2002; Meinert et al. 1996; 2000; Menegaux et al. 2006; Rudant et al. 2007; Steinbuch 1994)

Pregnancy exposure time window, residential insecticides

Insecticides, overall: (Davis 1991; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007; Pombo-de-Oliveira et al. 2006; Steinbuch 1994)

High total quality score: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002; Rudant et al. 2007; Steinbuch 1994)

High external validity score: (Davis 1991; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Rudant et al. 2007; Steinbuch 1994)

High exposure measurement score: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002)

High confounding score: (Infante-Rivard et al. 1999; Ma et al. 2002; Rudant et al. 2007; Steinbuch 1994)

Hospital-based: (Menegaux et al. 2006; Pombo-de-Oliveira et al. 2006)

Population-based: (Davis 1991; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Rudant et al. 2007; Steinbuch 1994)

ALL: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002; Rudant et al. 2007)

AML: (Rudant et al. 2007; Steinbuch 1994)

Indoor use: (Infante-Rivard et al. 1999; Leiss and Savitz 1995; Menegaux et al. 2006; Rudant et al. 2007)

Outdoor use: (Davis 1991; Infante-Rivard et al. 1999; Menegaux et al. 2006; Rudant et al. 2007)

Maternal use: (Davis 1991; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007)

Year published (2000+): (Ma et al. 2002; Menegaux et al. 2006; Pombo-de-Oliveira et al. 2006; Rudant et al. 2007)

Peer-reviewed publication: (Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006; Pombo-de-Oliveira et al. 2006; Rudant et al. 2007)

Removing extreme OR's: (Infante-Rivard et al. 1999; Ma et al. 2002; Menegaux et al. 2006; Pombo-de-Oliveira et al. 2006; Rudant et al. 2007; Steinbuch 1994)

Removing highest weight: (Davis 1991; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006; Pombo-de-Oliveira et al. 2006; Steinbuch 1994)

Including unspecified, indoor pesticides: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Lowengart et al. 1987; Ma et al. 2002; Menegaux et al. 2006; Pombo-de-Oliveira et al. 2006; Rudant et al. 2007; Steinbuch 1994)

Including wide/ill-defined exposure time windows: (Davis 1991; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Meinert et al. 1996; 2000; Menegaux et al. 2006; Pombo-de-Oliveira et al. 2006; Rudant et al. 2007; Steinbuch 1994)

#### Pregnancy exposure time window, residential herbicides

Herbicides, overall: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007)

High total quality score: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002; Rudant et al. 2007)

High external validity score: (Davis 1991; Infante-Rivard et al. 1999; Rudant et al. 2007)

High exposure measurement score: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002)

High confounding score: (Infante-Rivard et al. 1999; Ma et al. 2002; Rudant et al. 2007)

Population-based: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002; Rudant et al. 2007)

ALL: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002; Rudant et al. 2007)

Maternal use: (Davis 1991; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007)

Year published (2000+): (Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007)

Peer-reviewed publication: (Infante-Rivard et al. 1999; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007)

Removing extreme OR's: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002)

Removing highest weight: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002; Menegaux et al. 2006)

Including unspecified, outdoor pesticides: (Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Lowengart et al. 1987; Ma et al. 2002; Menegaux et al. 2006; Rudant et al. 2007)

#### Childhood exposure time window, unspecified residential pesticides

Unspecified pesticides, overall: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Kishi et al. 1993; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006; Steinbuch 1994)

High total quality score: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Ma et al. 2002; Steinbuch 1994)

High external validity score: (Buckley et al. 1989; Davis 1991; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Steinbuch 1994)

High exposure measurement score: (Buckley et al. 1989; Davis 1991; Infante-Rivard et al. 1999; Dell 2004; Ma et al. 2002)

High confounding score: (Infante-Rivard et al. 1999; Kishi et al. 1993; Ma et al. 2002; Steinbuch 1994)

Hospital-based: (Dell 2004; Kishi et al. 1993; Menegaux et al. 2006)

Population-based: (Buckley et al. 1989; Davis 1991; Infante-Rivard et al. 1999; Kishi et al. 1993; Leiss and Savitz 1995; Ma et al. 2002; Steinbuch 1994)

ALL: (Davis 1991; Infante-Rivard et al. 1999; Kishi et al. 1993; Ma et al. 2002)

AML: (Buckley et al. 1989; Steinbuch 1994)

Indoor use: (Buckley et al. 1989; Dell 2004; Ma et al. 2002)

Outdoor use: (Dell 2004; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006)

Year published (2000+): (Dell 2004; Ma et al. 2002; Menegaux et al. 2006)

Peer-reviewed publication: (Buckley et al. 1989; Infante-Rivard et al. 1999; Kishi et al. 1993; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006)

Removing extreme OR's: (Dell 2004; Infante-Rivard et al. 1999; Kishi et al. 1993; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006; Steinbuch 1994)

Removing highest weight: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Kishi et al. 1993; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006)

Including wide/ill-defined exposure time windows: (Buckley et al. 1989; Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Kishi et al. 1993; Leiss and Savitz 1995; Ma et al. 2002; Meinert et al. 1996; 2000; Menegaux et al. 2006; Rudant et al. 2007; Steinbuch 1994)

#### Childhood exposure time window, residential insecticides

Insecticides: (Davis 1991; Dell 2004; Fajardo-Gutierrez et al. 1993; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006)

High total quality score: (Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Ma et al. 2002)

High external validity score: (Davis 1991; Infante-Rivard et al. 1999; Leiss and Savitz 1995)

High exposure measurement score: (Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Ma et al. 2002)

High confounding score: (Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Ma et al. 2002)

Hospital-based: (Dell 2004; Fajardo-Gutierrez et al. 1993; Menegaux et al. 2006)

Population-based: (Davis 1991; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002)

ALL: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002)

Indoor use: (Davis 1991; Dell 2004; Fajardo-Gutierrez et al. 1993; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Menegaux et al. 2006)

Outdoor use: (Davis 1991; Infante-Rivard et al. 1999; Menegaux et al. 2006)

Year published (2000+): (Dell 2004; Ma et al. 2002; Menegaux et al. 2006)

Peer-reviewed publication: (Fajardo-Gutierrez et al. 1993; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006)

Removing extreme OR's: (Dell 2004; Fajardo-Gutierrez et al. 1993; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006)

Removing highest weight: (Davis 1991; Dell 2004; Fajardo-Gutierrez et al. 1993; Infante-Rivard et al. 1999; Ma et al. 2002)

Including unspecified, indoor pesticides: (Davis 1991; Dell 2004; Fajardo-Gutierrez et al. 1993; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Meinert et al. 1996; 2000; Menegaux et al. 2006; Rudant et al. 2007; Steinbuch 1994)

Including wide/ill-defined exposure time windows: (Buckley et al. 1989; Davis 1991; Dell 2004; Fajardo-Gutierrez et al. 1993; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006)

#### Childhood exposure time window, residential herbicides

Herbicides: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002; Menegaux et al. 2006)

High total quality score: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002)

High external validity score: (Davis 1991; Infante-Rivard et al. 1999)

High exposure measurement score: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002)

High confounding score: (Infante-Rivard et al. 1999; Ma et al. 2002)

Population-based: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002)

ALL: (Davis 1991; Infante-Rivard et al. 1999; Ma et al. 2002)

Year published (2000+): (Ma et al. 2002; Menegaux et al. 2006)

Peer-reviewed publication: (Infante-Rivard et al. 1999; Ma et al. 2002; Menegaux et al. 2006)

Removing extreme OR's: (Ma et al. 2002; Menegaux et al. 2006)

Removing highest weight: (Davis 1991; Ma et al. 2002; Menegaux et al. 2006)

Including unspecified, outdoor pesticides: (Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Menegaux et al. 2006)

Including wide/ill-defined exposure time windows: (Davis 1991; Dell 2004; Infante-Rivard et al. 1999; Leiss and Savitz 1995; Ma et al. 2002; Meinert et al. 1996; 2000; Menegaux et al. 2006; Rudant et al. 2007)

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